

#### LEADERSHIP GROUP

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Councilmember Jennifer Robertson

Mayor Liz Reynolds

Councilmember Tola Marts

**Executive Dow Constantine** 

Councilmember Reagan Dunn

Councilmember Kathy Lambert

Councilmember Claudia Balducci

Sheriff John Urquhart

Executive Director Tom Orr

Commander Erik Scairpon

REDMOND POLICE DEPARTM

Mayor Denis Law

Councilmember Lorena González

Council President Bruce Harrell

Commissioner Tim Osgood WOODINVILLE FIRE AND RESCUE

Brian Maxey SEATTLE POLICE DEPARTMENT

Tom Koney (non-voting) KING COUNTY EXECUTIVE SERVICES

#### PLANNING GROUP

Kathy Lombardo, Co-Chair

Lora Ueland, Co-Chair VALLEY COMMUNICATIONS CENTER

Chad Barnes

Commander Chris Wilson ISSAQUAH POLICE DEPARTMENT

Diane Carlson KING COUNTY EXECUTIVE'S OFFICE

Lise Kave

KING COUNTY COUNCIL STAFF

Patti Cole-Tindall KING COUNTY SHERIFF'S OFFICE

Marilynne Reard CITY OF KIRKLAND (SOUND CITIES)

Edia Gillico CITY OF SEATTLE MAYOR'S OFFICE

Commissioner Tim Osgood

Brian Smith SEATTLE POLICE DEPARTMENT

Meg Goldman (non-voting) KING COUNTY EXECUTIVE SERVICES

#### TASK FORCE CHAIRS

Diane Carlson Governance

Edie Gilliss, Governance City of Seattle Mayor's Office

Bill Kehoe, Technology KING COUNTY INFORMATION TECHNOLOGY

Chelo Picardal, Technology

Marilynne Beard, Finance CITY OF KIRKLAND (SOUND CITIES)

#### LEADERSHIP BRIEF

January 19, 2017

#### Meeting time & place:

Thursday, January 19, 2017, 9:00-11:00am at Chinook Building 1st floor Conference Center, Suite 123 (401 5th Avenue).

#### Topics:

- Program Updates. Expect E-911 Program Office and Interim Advisory Group updates from Interim Program Manager Kathy Lombardo and IAG Chair Erik Scairpon.
- Process Updates. The evolution of the strategic planning process, with a few updates to the direction from the Scoping report, including:
  - Updates to the participant roster. See page 6.
  - Task Forces co-chairs. See page 6.
  - Adjustments to the Equity Engagement process. See page 8.
- Issue Brief. The attached Issue Brief outlines key issues to be addressed by the strategic plan. We need Leadership Group feedback and approval of this formative product.
- Technology & Operations Expectations. The next deliverable is a Technology & Operations strategy (to be reviewed at the May 20 Leadership Group meeting). This is an opportunity for the Leadership Group to ask questions of the task force about their work in the months ahead.

# **Leadership Packet Contents:**

• Top Sheet (this page)
• Leadership Group <u>Agenda</u> for 1/19/17
• Leadership Group Minutes from 9/20/16
• E-911 Strategic Plan <b>Rosters</b> (updated)
• Equity Engagement Plan (updated)
• Issue Brief

#### Strategic Planning Schedule:

April 28 is the 3<sup>rd</sup> of four Leadership Group meetings as illustrated:







Councilmember Jennifer Robertson CITY OF BELLEVUE

Mayor Liz Reynolds

Councilmember Tola Marts

**Executive Dow Constantine** 

Councilmember Reagan Dunn

Councilmember Kathy Lambert

Councilmember Claudia Balducci

Sheriff John Urquhart KING COUNTY

Executive Director Tom Orr

Commander Erik Scairpon REDMOND POLICE DEPARTMENT

Mayor Denis Law Councilmember Lorena González

Council President Bruce Harrell

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PLANNING GROUP Kathy Lombardo, Co-Chair KING COUNTY E-911 PROGRAM OFFICE

Lora Ueland, Co-Chair

Chad Barnes Commander Chris Wilson

ISSAQUAH POLICE DEPARTMENT Diane Carlson KING COUNTY EXECUTIVE'S OFFICE

Lise Kaye King County Council Staff Patti Cole-Tindall KING COUNTY SHERIFF'S OFFICE

Marilynne Beard CITY OF KIRKLAND (SOUND CITIES)

CITY OF SFATTLE MAYOR'S OFFICE Commissioner Tim Osgood WOODINVILLE FIRE AND RESCUE

Brian Smith SEATTLE POLICE DEPARTMENT

Meg Goldman (non-voting) KING COUNTY EXECUTIVE SERVICES

TASK FORCE CHAIRS

Diane Carlson Governance 11:00 KING COUNTY EXECUTIVE'S OFFICE

Edie Gilliss, Governance CITY OF SEATTLE MAYOR'S OFFICE Bill Kehoe, Technology KING COUNTY INFORMATION TECHNOLOGY

Chelo Picardal, Technology Marilynne Beard, Finance CITY OF KIRKLAND (SOUND CITIES)

Tom Koney, Finance KING COUNTY EXECUTIVE SERVICES

#### **AGENDA**

January 19, 2017 9:00am - 11:00am

## **Chinook Building**

1st Floor Conference Center, Suite 123 | 401 5th Avenue Call in number: 206 263 8114, Access Code: 119584

ACTION

LFAD

**Brian Scott** 

9:00 Welcome

**ITFM** 

TIME

9:10

9:20

10:15

10:50

- Strategic Planning Process "Refresher"

**Program Updates** 

- E-911 Program Office; IAG

Information

BDS Urban Planning & Design

Information

Information / **Approval** 

Kathy Lombardo King County

> + Erik Scairpon Redmond Police

> > Brian

Brian

**Process Update** 

- Timeline

- Evolution since Scoping • Rosters / co-chairs

Equity engagement

9:30 **Issue Brief** 

> - Governance - Technology & Operations

- Finance

**Round Table** 

**ADJOURN** 

Technology Draft Update & **Expectations** 

Information /

Discussion /

**Approval** 

Discussion

Kevin Kearns, IXP + Bill Kehoe

CIO, King County + Chelo Picardal CTO, Bellevue

Discussion

Brian / All

#### Materials:

- King County E-911 Strategic Plan Issue Brief
- **Process Updates**
- Equity Engagement Plan







Councilmember Jennifer Robertson CITY OF BELLEVILE

Mayor Liz Reynolds

Councilmember Tola Marts CITY OF ISSAQUAH

**Executive Dow Constantine** 

Councilmember Reagan Dunn

Councilmember Kathy Lambert

Councilmember Claudia Balducci

Sheriff John Urquhart

Executive Director Tom Orr NORCOM

Commander Erik Scairpon REDMOND POLICE DEPARTMENT

Mayor Denis Law

Councilmember Lorena González

Council President Bruce Harrell

Captain Ronald Rasmussen SEATTLE POLICE DEPARTMENT

Commissioner Tim Osgood WOODINVILLE FIRE AND RESCUE

Jody Miller (non-voting)
KING COUNTY EMERGENCY MANAGEMENT

#### PLANNING GROUP

Kathy Lombardo, Co-Chair Executive Director Lora Ueland, Co-Chair VALLEY COMMUNICATIONS CENTER

Chad Barnes

Commander Chris Wilson

Diane Carlson KING COUNTY EXECUTIVE'S OFFICE

Lise Kaye KING COUNTY COUNCIL STAFF

Chief Patti Cole-Tindall

Marilynne Beard

CITY OF KIRKLAND (SOUND CITIES)

Edie Gilliss (Stacey Jehlik, Interim) CITY OF SEATTLE MAYOR'S OFFICE

Captain Ronald Rasmussen SEATTLE POLICE DEPARTMENT

Commissioner Tim Osgood WOODINVILLE FIRE AND RESCUE

Meg Goldman (non-voting) KING COUNTY EXECUTIVE SERVICES

#### TASK FORCE CHAIRS

Sharon Potts, Technology KING COUNTY INFORMATION TECHNOLOGY

Marilynne Beard, Finance

Tom Koney, Finance KING COUNTY EXECUTIVE SERVICES

Diane Carlson, Governance

Edie Gilliss (Stacey Jehlik, Interim), Governance

# LEADERSHIP GROUP

# September 20, 2016 9:00am - 11:00am

#### **Chinook Building**

1st Floor Conference Center, Suite 123 401 5th Avenue

Call in number: 206 263 8114, Access Code: 119584

#### **MEETING NOTES & ACTION ITEMS**

#### LG Members Attending:

Jennifer Robertson John Urguhart **Denis Law** 

Tola Marts Tom Orr Ronald Rasmussen

**Erik Scairpon** Reagan Dunn Tim Osgood

#### LG Members Not Attending:

Liz Reynolds Kathy Lambert\* Lorena González Claudia Balducci<sup>3</sup> **Dow Constantine Bruce Harrell** 

#### Guests Attending:

Laura Pitarys, E-911 Kate Davis, KC PSB Patti Cole-Tindall, KC Sheriff Deb Flewelling, E-911 Marilynne Beard, Kirkland Lise Kaye, KC Council Kathy Lombardo, E-Greg Hough, Seattle FD Ross Marzolf, KC Council

911

Tom Koney, KC DES Chris Wilson, Issaquah PD Stacey Jehlik, City of Lora Ueland, Valley Comm

Seattle

Diane Carlson, KC Executive

#### Consultants Attending:

Brian Scott, BDS Tim Ceis, CBE Kevin Kearns, IXP Andrés Mantilla, CBE Gabriel Silberblatt, BDS Morgan Shook, ECONorthwest Tessa Krebs, ECONorthwest Beth Dufek, BDS Kate Nolan, CBE

#### I. Project Overview





<sup>\*</sup>Could not attend due to conflict with Council subcommittee meeting. Members were briefed by Strategic Planning Management Team.

Brian Scott (BDS) gave an overview of the Strategic Planning Process and discussed its relationship to the Scoping Process.

Brian noted that since the scoping report the delivery of the Governance recommendations have moved back and technology recommendations moved forward.

#### II. Expectations of Leadership Group

Brian gave an overview of the responsibilities of Leadership Group members and facilitated a conversation about the Leadership Group members' expectations of the Strategic Planning process.

#### **SUMMARY**

LG members expressed enthusiasm for the process and satisfaction with the Task Force Rosters as they had been assembled. Multiple LG members commented on the importance of adequate lead-time for reviewing materials so that they could share draft recommendations with their constituencies before adopting them formally.

#### **ACTION ITEMS**

- LG members request a minimum of two (2) weeks to review meeting materials before the meeting date. Management Team will make every effort to provide this window of review time before meetings.
- LG members will be given access to the Strategic Planning SharePoint site, which will contain an up-to-date master calendar for all LG, PG, and Task Force Meetings.

#### III. Program Updates

Kathy Lombardo gave an E-911 Program Office update, stressing the ongoing need for adequate resources to meet its objectives.

Erik Scairpon gave an IAG update, noting that he feels the group has come a long way in the last year regarding trust amongst all involved.

#### IV. Process Review

Brian introduced the consultant team and work plan/deliverables.

Tim Ceis, from CBE Strategic gave an overview of Governance task force process, including: Goal & Charge, Statement of Strategic Questions, and Timeline & Milestones.

Kevin Kearns, from IXP gave an overview of the Technology & Operations process, including: Goal & Charge, Statement of Strategic Questions, and Timeline & Milestones.

Kevin stresses that the name of the task force is Technology & Operations, but they will *not* be evaluating how the PSAPs do business; merely cultivating a nuanced understanding of how the existing operational issues of each of the PSAPs.

Morgan Shook, from ECONorthwest gave an overview of the Finance task force process, including: Goal & Charge, Statement of Strategic Questions, and Timeline & Milestones.

#### V. Task Forces

Brian presented the current rosters of all three task forces, asking for LG feedback.

#### **ACTION ITEMS**

 Need for Small PSAP representation on the Finance task force was noted: agreement that deadline would be extended to accommodate a new member.

#### VII. Round Table (Equity focus)

Andrés Mantilla, from CBE Strategic gave a short presentation about definitions of equity and how the LG had defined that goal in the Scoping process.

#### **SUMMARY**

LG members discussed if/how the following groups might need special attention during the strategic planning process:

- Native Americans and tribal land residents
- Residents of rural or unincorporated areas

Meeting Adjourned 10:55am

#### King County Regional E-911 Strategic Plan Participants

**Leadership Group** 

Councilmember Claudia Balducci

King County

**Executive Dow Constantine** 

King County

Councilmember Reagan Dunn

King County

Councilmember Lorena González

City of Seattle

Council President Bruce Harrell

City of Seattle

Councilmember Kathy Lambert

King County

Mayor Denis Law

City of Renton (Sound Cities)

Councilmember Tola Marts

City of Issaquah (Sound Cities)

Brian Maxey

Seattle Police Department

Tom Orr NORCOM

Commissioner Tim Osgood Woodinville Fire and Rescue

Mayor Liz Reynolds

City of Enumclaw (Sound Cities)

Councilmember Jennifer Robertson

City of Bellevue

Commander Erik Scairpon Redmond Police Department

Sheriff John Urquhart

King County

Tom Koney, non-voting member

King County Dept. of Executive Services

**Planning Group** 

Kathy Lombardo (Co-Chair)

King County E-911 Program Office

Lora Ueland (Co-Chair)

Valley Communications Center

Chad Barnes

City of Bellevue

Marilynne Beard

City of Kirkland (Sound Cities)

Diane Carlson

King County Executive's Office

Patti Cole-Tindall

King County Sheriff's Office

**Edie Gilliss** 

City of Seattle

Lise Kaye

King County Council

Commissioner Tim Osgood

Woodinville Fire and Rescue

Brian Smith

Seattle Police Department

Commander Chris Wilson

Issaquah Police Department

Meg Goldman, non-voting member, for project management

King County Dept. of Executive Services

**Technology & Operations Task Force** 

Bill Kehoe, Co-Chair

King County Department of Information Technology

Chelo Picardal, Co-Chair

City of Bellevue

Krista Camenzind

King County Council Staff

Deb Flewelling

King County E-911 Program Office

Dee Hathaway NORCOM

#### King County Regional E-911 Strategic Plan Participants

Gregory Hough City of Seattle

Jess Nelson

Valley Communications Center

Tim Osgood

Woodinville Fire and Rescue

Kellie Shapard

Abused Deaf Women's Advocacy Services

Micki Singer City of Bothell

Russ St. Myers

Seattle Police Department

Jessica Sullivan

King County Sheriff's Office

Kenn Moisey – *non-voting member* 

Washington State E-911

#### **Finance Task Force**

Marilynne Beard, Co-Chair

City of Kirkland

Tom Koney, Co-Chair

King County Executive Services

Tatyana Bogush-Stakhov Valley Communications Center

Kate Davis

King County Performance Strategy and Budget

Jennifer Devore City of Seattle

Tom Goff

King County Council

Krystal Hackmeister City of Bellevue

Tara Murker

University of Washington Police Department

Tim Osgood

Woodinville Fire and Rescue

De'Wayne Pitts

King County Sheriff's Office

Tom Walsh City of Seattle

#### **Governance Task Force**

Diane Carlson, Co-Chair

King County Executive's Office

Edie Gilliss, Co-Chair

City of Seattle

Chad Barnes City of Bellevue

Kathy Baskin Port of Seattle

Jane Christenson

City of Redmond (Sound Cities)

Patti Cole-Tindall

King County Sheriff's Office

Kathy Lombardo

King County E-911 Program Office

**April Sanders** 

King County Council

Lora Ueland

Valley Communications Center

#### **Interim Advisory Group**

Captain Jessica Sullivan, Chair King County Sheriff's Office

Sheryl Mullen, Vice-Chair Redmond Police Department

Tom Orr NORCOM

Brian Smith

Seattle Police Department

Kathy Lombardo, *non-voting member* King County E-911 Program Office

#### **King County E-911 Program Office Staff**

#### Consultants

BDS Planning & Urban Design (CBE Strategic, IXP, EcoNorthwest)

#### **King County E911 Strategic Plan**

Re: Scope of Work for Equity Engagement

**Prepared by:** CBE Strategic

For consideration by: The Leadership Group for the King County E911 Strategic Plan

January 4<sup>th</sup>, 2017

The following scope of work is provided to continue and amend the equity conversation as part of the King County Regional E-911 Strategic Plan. The purpose of this scope is to add perspective and input to the strategic plan recommendations. This approach will take the place of the current strategy which has not proven successful to thoughtfully engage many of these partners.

The consultant team will visit these organizations along with a technical expert from the County's Technology and Operations taskforce to both establish stronger relationships as well as to answer any technical questions should they arrive. On the whole the conversations will focus on:

- a) Ease of Use of 911 System
- b) Access to System

These conversations should be less formal to give space for communities to articulate priorities and user issues. Meetings will be scheduled to coincide with release of draft proposals that can provide some more specific recommendations for community groups to react to. As, much as possible presentations will be scheduled for the regularly scheduled meetings of the groups and organizations we are targeting.

#### Scope of Work

# • Identify organizations with interests in participating in the strategic plan including those identified in the scoping plan:

This scope will engage with the following organizations. Please note that the role of Kellie Shepherd Abused Deaf Women's Advocacy Services (ADWAS) as a full member of the Technology and Operations Task Force will not change.

- 1) One America Non English
- 2) API CHAYA Low Income
- 3) Peace for the Streets by Kids from the Streets Youth
- 4) Note: ADWAS Consultant staff will also organize an input meeting for additional Deaf, Deaf-Blind and Hard of Hearing community

#### Additional Outreach Organizations:

- 1) Seniors in Action Seniors
- 2) Washington ReWA Communities of Color

#### · Identify engagement strategies that may include one-on-one, small groups, or combined meetings:

Based on conversations with individual organizations the consultant team can determine which form of outreach will best suit the needs of the community. The outreach consultant will facilitate in each case and will coordinate with KC taskforce members as meetings are scheduled. The outreach consultant will handle all meeting logistics and coordinate materials with other consultants and task forces.

#### • Final recommendations to be included in final strategic plan

Working with the planning team and staff the outreach consultant will provide final content, themes and overview of outreach process for inclusion in the final strategic plan.





#### **EXECUTIVE SUMMARY**

This briefing document outlines Key Issues in Governance, Technology & Operations, and Finance to be resolved during the King County Regional E-911 strategic planning process.

The strategic planning process was set in motion by King County Ordinance 18139, and shaped by the King County E-911 Scoping Committee in its Strategic Planning Process Report of May 31, 2016. In that report, the Scoping Committee identified a Shared Vision, Guiding Principles, and Goals that are fully restated in Appendix I.

# Shared Vision, Mission, Guiding Principles, and Goals

#### Shared Vision — for the Regional E-911 System

King County's Regional E-911 System will be among the best in the country in terms of:

- Rapid and effective routing of requests for service;
- Efficient use of public resources;
- Effective deployment of evolving technology; and
- Adherence to the guiding principles.

#### Mission — for the Regional E-911 System

**In progress:** Clarity and agreement about the current and future core service responsibilities and associated costs of the King County Regional E-911 System and Program Office is being developed during this strategic planning process. (due: February 2017 to Planning Group; May 2017 to Leadership Group)

#### Guiding Principles — for the Regional E-911 System

- 1. Process
  - a. Transparency
  - b. Project Management Principles
  - c. Collaboration
  - d. Predictability
  - e. Advocacy
  - f. Inclusion

- 2. Finances
  - a. Fiscal Responsibility
  - b. Financial Sustainability
  - c. Cost Effective
- 3. Standards
  - a. National Best Practices
  - b. Performance Metrics
  - c. Continuous Improvement

## Goals — for the Regional E-911 System

As part of the strategic planning process, develop a dashboard of outcome metrics to monitor progress toward these goals, to be in alignment with the guiding principles above.

- 1. No Request Lost
- 2. Prompt Response
- 3. Seamless System-wide Technology
- 4. Meet or Exceed Industry Standards
- 5. Equity
- 6. Secure, Resilient & Survivable

# **Strategic Questions**

The Regional E-911 Scoping Committee also identified a number of strategic questions to guide the work of the three Strategic Planning Task Forces, including:

#### Governance

- G1. What is the <u>definition</u> of the King County Regional E-911 System?
- G2. What is the <u>management structure</u> for the King County Regional E-911 System, in terms of authority, oversight, operations, accountability, responsibility, and performance monitoring?
- G3. What is the major <u>decision-making structure</u> for the King County Regional E-911 System, including process management, research, input, and authority?
- G4. What is the conflict resolution process for the King County Regional E-911 System?
- G5. What is the <u>stakeholder engagement structure</u> for the King County Regional E-911 System, including input into decisions, reporting, and performance monitoring?

#### Technology & Operations

- T1. What is the <u>technology vision</u> for the King County Regional E-911 System, in terms of the technology's purpose, evolution, and investment approach?
- T2. What are the <u>technology requirements</u> for integrating with the state's E-911 system, and for local jurisdictions to connect to the regional E-911 system?
- T3. What is the <u>ongoing decision process</u> for technology investments, including options, tradeoffs, priorities, budgets, and schedules?
- T4. What are the <u>ongoing performance metrics</u> for technology in the King County Regional E-911 System, including the performance of the system, vendors, and local partners?
- T5. What are the <u>security requirements</u> for the King County Regional E-911 System, including protection of the system, individual privacy, and proprietary information?

#### **Finance**

- F1. What are the <u>procedures and processes</u> for forecasting, reporting, auditing, and operations related to King County Regional E-911 System revenue and expenditures?
- F2. What are the <u>funding needs and revenue strategies</u> for the King County Regional E-911 System, including NG911 upgrades and keeping the system up to date over time?
- F3. What are the <u>stakeholder reporting requirements</u> related to the King County Regional E-911 System finances, including revenue, expenditures, efficiency, and effectiveness?
- F4. What are the <u>investment management policies</u> for the King County Regional E-911 System related to forecasting, investments, reserves, and contingencies?

# **Key Issues**

In the context of the Shared Vision, Guiding Principles, and Goals, the Strategic Plan Task Forces have responded to the Strategic Questions by identifying the following Key Issues as a comprehensive check-list of topics to be addressed in order for the strategic plan to answer the questions above:

#### Governance

- Decision-Making Authority, Feedback, and Transparency: A formal process is needed to effectively make decisions about the KC E-911 Regional System and deal with emerging challenges. This should include clear roles responsibilities, and communication protocol to enable timely decisions that are responsive to both established objectives and new information.
- Conflict Resolution: A conflict resolution process is needed, and should include how
  conflicts are identified, at what level of governance are they addressed, and how they are
  they resolved,
- **Coordination/Communication:** There is demand for establishing protocols for communication between the E-911 Program Office and the PSAPs, as well as among and between the PSAPS.

#### Technology & Operations

- **Pace of Change:** The pace of technology change brings new public and user expectations that can stress the Regional E-911 System and its operations, and will require a continuous process to review and evaluate new changes and fiscal impacts.
- Architecture Complexity and Strategy: The overall architecture of the Regional E-911 System needs to be evaluated, with a strategy developed to respond to overall system objectives and evolving future conditions. This may require an ongoing Technology & Operations committee to conduct continuous review and evaluation.
- **Security:** Security of the Regional E-911 System overall, as well as other critical PSAP systems, needs to be a constant focus and priority.
- Call & Operational Complexity: The nature of emergency calls is changing rapidly, with ever-increasing volumes of calls from wireless devices and emerging technologies such as text, video and telematics calls to 911. This will drive a variety of ongoing technological, operational and funding issues for the Regional E-911 System overall and the systems and operations at the individual PSAPs. A technology and operations strategy must balance operational impacts with effectiveness gains from technology in a diverse environment with geographically distributed PSAPs, different jurisdictional boundaries and variety of call types handled by various PSAPs.

#### **Finance**

Fiscal Sustainability: Forecasted increases in operating and capital expenditures need
to be evaluated in detail to determine whether alternative assumptions are needed.
 Forecasted growth in these expenditures is driving fiscal deficits in the future. However,

revenue adequacy of existing sources will also need to be evaluated as part of a financial sustainability plan.

- Clarity of Financial Responsibilities. There is ambiguity about the appropriate roles of the E-911 Office and the PSAPs in supporting the Regional E-911 System. It will be important to determine what services the Program Office is required to provide, and beyond those costs, what are the financial implications, if any, for individual PSAPs.
- **Financial Policies & Accountability:** Clear financial policies and accountability are needed related to budgeting and accounting.
- **Distribution of Funding:** A clear and transparent system for distribution of funding between the E-911 Office and PSAPs and between PSAPs is essential, and this system must also be able to evolve with changing technologies and operations.

Once this draft document is finalized and approved by the Planning Group and Leadership Group, the Key Issues above will serve as a check-list for strategic planning, in order to guide identification of measurable objectives, strategic actions, and key performance metrics.

Objectives will respond to the issues above, as well as the vision, principles, and goals listed on page 1. These objectives will also be devised to be responsive to future issues, opportunities, and future unknowns.

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#### INTRODUCTION

This briefing document outlines key governance, technology and operations, and finance issues to be resolved during the King County Regional E-911 System strategic planning process. The resulting strategic plan will address priorities for the regional portions of the E-911 system and guide the ongoing process for decision making, funding and implementing those priorities.

In sections on Governance, Technology & Operations, and Finance, this document:

- Restates the Strategic Questions from the Strategic Plan Scoping process,
- Identifies **Best Practices** being researched by the Strategic Planning Task Forces,
- Responds to Baseline Questions posed during the Scoping process,
- Explores Existing Conditions and Future Challenges, and
- Summarizes **Key Issues** to be addressed through the Strategic Planning process.

Once this draft document is finalized and approved by the Planning Group and Leadership Group, the Key Issues identified here will serve as a check-list for strategic planning. These issues are listed as a group in the Executive Summary, and described in more detail within the Governance, Technology & Operations, and Finance sections that follow.

In identifying the Key Issues, the Task Forces used the following criteria:

- Cover the breadth of the Strategic Questions,
- Respond to Best Practices,
- Capture Existing Conditions, and
- Address Future Challenges as summarized in this document.

As such, the Key Issues frame the strengths, opportunities, and challenges in each content area. The Key Issues are intended to focus future analysis in a way that responds to strategic questions, best practices, existing conditions, and future challenges. During the next phase of strategic planning, these Key Issues will guide identification of measurable **Objectives**, **Strategic Actions**, and **Key Performance Metrics**.

An additional Key Issue did not come directly from the Task Forces, but rather has emerged in various forms throughout the process is a definition of the King County Regional E-911 System and Program Office **Mission**. The strategic plan must provide a definition of what core services and technologies are fundamental to the E-911 Program Office's role in order to provide direction to future budgeting and operational decisions. This includes a clear definition of who pays for what, who assumes the contractual risk, and a clear line between the system's regional elements versus local elements.

# **Strategic Planning Charge**

Ordinance 18139 calls for a King County Regional E-911 System's Strategic Plan to:

- 1. <u>Integrate with the state's E-911 system</u> and the responsibilities of local jurisdictions in their delivery of E-911 dispatch services;
- 2. <u>Develop a ten-year technology investment strategy</u> for the Regional King County E-911 System with tactics and a process for adapting to evolving technology and service conditions;
- 3. <u>Develop a ten-year sustainable financial plan</u> for the Regional King County E- 911 System with tactics and a process for adapting to evolving financial conditions; and
- 4. <u>Define an ongoing decision-making or governance structure</u> for implementing and achieving the vision and goals of the Regional King County E-911 System, including a conflict resolution process.

# **Strategic Planning Definitions**

For the purposes of this King County Regional E-911 System Strategic Planning Process, the following definitions apply:

<u>Shared Vision</u> – An aspirational statement of what the King County Regional E-911 System should be in the future, as initially defined during Scoping.

<u>Mission</u> – Statement of the King County Regional E-911 System and Program Office's organizational purpose and core services.

<u>Guiding Principles</u> – Major tenets that identify the manner in which the King County Regional E-911 System will pursue its Shared Vision, as initially defined during Scoping.

<u>Goals</u> – Prioritized future conditions and targets serving as an intermediate step toward achieving the Shared Vision in line with the Guiding Principles, as initially defined during Scoping.

<u>Key Issues</u> – The most critical issues currently facing the King County Regional E-911 System, as articulated by the Strategic Plan Task Forces in this Issue Brief.

<u>Objectives</u> – Specific statements of desired conditions responding to the Key Issues that can be measured within a specified timeframe. To be defined in Task Force draft recommendations.

<u>Strategic Actions</u> – Activities that need to be taken in order to directly accomplish the Objectives. To be defined in Task Force draft recommendations.

<u>Key Performance Metrics</u> – Data that will be collected and reviewed to track and measure progress on achieving the Objectives. To be defined in Task Force draft recommendations.

# **Glossary of Terms and Acronyms**

9-1-1 Call Routing Network – Together the Washington State 911 office and the King County E-911 Program Office maintain the 9-1-1 call routing network which consists of a system of circuits, networks and/or equipment designed to move 9-1-1 calls from the state system to the Public

Safety Answering Points (PSAPs), including the information technology system known as Emergency Services Internet-protocol Network (ESInet).

COTS - Commercial Off The Shelf Software

<u>CPE</u> - Customer Premise Equipment – Equipment used by the PSAP to process 9-1-1 calls.

<u>E-911 Program Office</u> – In King County, the Regional E-911 System for routing 9-1-1 calls is administered by the E-911 Program Office, which is a section of the Office of Emergency Management within the Department of Executive Services in the county government.

EMS - Emergency Medical Services.

<u>ESInet</u> – Emergency Services Internet-Protocol Network – A statewide system for routing emergency calls. ESInet is part of the 9-1-1 Call Routing Network.

FD - Fire Department.

<u>IAG</u> – Interim Advisory Group – The Interim Advisory Group's purpose is to advise and consult with the King County E-911 program office regarding technology, financial and system operational issues until completion of the E-911 strategic plan and implementation of an ongoing decision-making and governance system. The advisory group is guided by King County Council by Ordinance 18139 to provide comment and recommendations on the county's E-911 program office 2017-2018 budget proposal.

NENA - National Emergency Number Association.

<u>NG911</u> – <u>Next Generation 9-1-1</u> – A national plan<sup>1</sup> aimed at updating the 9-1-1 service infrastructure to improve public emergency communications services in an increasingly wireless mobile society. In addition to calling 9-1-1 from a phone, it seeks to enable the public to transmit text, images, video and data to the PSAPs.

PD - Police Department.

<u>PSAP</u> – Public Safety Answering Point – Call answering locations for 9-1-1 calls originating in a given area. In King County, the twelve PSAPs are governed and largely funded by the independent jurisdictions and agencies they serve. PSAPs are responsible for answering a 911 call sent to their center.

<u>Regional E-911 System</u> – In King County, the phrase "Regional E-911 System" or simply "The System" — as used in this document only — includes the governance, technology, operations and

<sup>&</sup>lt;sup>1</sup> http://c.ymcdn.com/sites/www.nena.org/resource/collection/22dbdb9d-fbd7-445e-a760-1c39a222ed34/National\_NG911\_Migration\_Plan.pdf?hhSearchTerms=%22NG911%22

finances related to the area of responsibility of the E-911 Program Office, as defined by the RCW and WAC (Revised Code of Washington and Washington Administrative Code).<sup>2</sup>

<u>Telecommunications Providers</u> – Private companies (such as AT&T, Verizon, Century Link, etc.) that provide telecommunications services, route calls, and collect excise taxes.

<u>VoIP calls</u> – Voice Over Internet Protocol calls – Calls through telephone equipment using the Internet.

<u>Washington State 911 Office</u> – The Washington State 911 office and the King County E-911 office share responsibility for maintaining a network and equipment that links private telecommunications providers to the 911 call network.

Wireless calls - Calls through cellphones.

Wireline calls - Calls through traditional landline telephones.

# Process ground rule on PSAP consolidation

The King County Regional E-911 System Strategic Plan Scoping process clearly states that "the evolving number and configuration of PSAPs is not part of the strategic planning process. Being locally governed and largely locally funded, the number and configuration of PSAPs is an ongoing process of local decisions by individual PSAPs and/or groups of PSAPs. The strategic plan will not include a top-down PSAP consolidation."

This means that the Strategic Plan will not dictate the number or configuration of the PSAPs. It does not mean that the Strategic Plan needs to be designed to protect the existing number and configuration of the PSAPs. Once the Strategic Plan is finished and adopted, the PSAPs themselves might choose to modify their number and configuration to better fit with the evolving regional system. But, the Strategic Plan will not dictate this action.

<sup>&</sup>lt;sup>2</sup> See RCW 82.14B.020 (2), (3); WAC 118-66-030 (2), (62); see generally RCW 38.52.51; 82-14B-010 et. seg.; WAC 118-66-010 et. seg.

# **GOVERNANCE ISSUES**

#### Introduction

In June 2015, the King County Auditor's Office published findings from its independent review of the King County Regional E-911 System operations and recommended creation of a governance mechanism. The King County Auditor's report identified the lack of a formal and effective governance structure as the most serious challenge facing the implementation of Next Generation 911 (NG911). The Auditor recommended establishing a governance structure to improve collaboration, planning, and decision-making. Currently, there is no formal process for input or feedback, and in the event that partners disagree on priorities, projects or programs, there is no mechanism for conflict resolution. All partners in the King County Regional E-911 System want to develop a formal governance structure and to provide clarity regarding decision-making processes.

# **Strategic Governance Questions**

The Regional E-911 Scoping Committee identified a number of strategic questions, including:

- G1. What is the definition of the King County Regional E-911 System?
- G2. What is the management structure for the King County Regional E-911 System, in terms of authority, oversight, operations, accountability, responsibility, and performance monitoring?
- G3. What is the major decision-making structure for the King County Regional E-911 System, including process management, research, input, and authority?
- G4. What is the conflict resolution process for the King County Regional E-911 System?
- G5. What is the stakeholder engagement structure for the King County Regional E-911 System, including input into decisions, reporting, and performance monitoring?

#### **Best Practices**

What are others doing for governance of regional E-911 systems with multiple operating groups?

Several reports list best practices in governance that will be reviewed and used by the Task Force to evaluate governance structures from other jurisdictions. The FCC, APCO, and NENA each have reports that address best practices for successful governance structures given the new technology environment of NG 911. The Task Force will review these practices and begin to address the key issues and challenges for governance of the King County Regional E-911 System by evaluating the effectiveness of other governance structures from jurisdictions in the United States and within King County. Those governance examples will be selected based on 4 main criteria:

- Multiple jurisdictions or PSAPS are represented
- Their role is advisory to a final decision authority

- They include a combinations of local and regional systems
- There is a structure for operational and policy input

Once governance examples are selected they will be evaluated based on best practices for NG 911 systems identified by the FCC, APCO, and NENA and on additional criteria identified by the Task Force including:

- Definition of the system being governed
- Participation of partners within that system
- Processes for decisions and dispute resolution
- Reporting and communication
- System priorities, works plans or strategic planning
- Budget and finances
- Technology and operations
- Standards and metrics
- Representation and voting
- Authority

The evaluation and discussion of the attributes of other governance structures will lead the Task Force to develop a governance model for the King County Regional E-911 System.

#### **Baseline Questions**

What is the current governance structure (organization chart; decision structure oversight; accountability; responsibility, conflict resolution process)?

Currently there is no formal governance structure to guide the interactions between the public-safety answering points (PSAPs) and King County or that facilitates collaboration on decisions related to the operational, technical, and financial management of the King County Regional E-911 System. In 2010, a five-year Interlocal Agreement (the King County Enhanced 911 Participation Agreement) was signed by all PSAPs. That Agreement expired and due to a breakdown of trust between the PSAPs and the E-911 office was not re-adopted by most of the partners. The City of Seattle and the King County Sherriff's office were the only PSAPs to sign the new agreement. Historically, the E-911 Program Office has held bi-monthly meetings for PSAP directors to discuss upcoming projects and related business. However, there was no formal structure for decision-making or conflict resolution regarding E-911 projects that impact PSAPs, the Regional E-911 System, or its resources.

The County has final appropriations authority and the King County E-911 Program Office has the ability to make operational decisions within their approved budget authority.

An Interim Advisory Group (IAG) was formed in 2016 and is tasked with advising and consulting with the King County E-911 Program Office regarding technology, financial and system operational issues until completion of the King County Regional E-911 System Strategic Plan and implementation of a new governance structure.

# What are the governance lessons from the 2015 King County Auditor's report on E-911 operations?

The King County Auditor's report found that the lack of a formal governance structure was the most pressing issue for the King County Regional E-911 system. The report recommended beginning a process to create a governance structure that contains a conflict resolution process and a formal structure for collaboration and input.

The Auditor's report went on to advise that King County temporarily suspend its implementation of NG911 until these governance issue could be resolved. The recommendations focused on improving collaboration and planning as well as establishing a financial baseline that would allow stakeholders to agree on required spending and estimated revenue for the program.

# **Existing Conditions**

The Enhanced 911 Participation Agreement was not unanimously ratified by PSAPs and is not in effect. Currently, there is not a formal governance structure for PSAPs and the County to collaborate on decisions related to the operational, technical and financial management of the King County Regional E-911 System. The lack of a formal structure for making decisions or resolving conflicts with E-911 Program Office projects has resulted in the appearance of unilateral action by the King County E-911 Program Office and frustration at the PSAP level with the lack of transparency and participation in the decision-making process. The King County Council has final funding authority while the E-911 Program Office makes operational and project decisions within its approved budget authority.

An Interim Advisory Group (IAG) was formed in 2016 and tasked with advising and consulting with the King County E-911 Program Office regarding technology, financial, and system operational issues during the development of the Regional E-911 Strategic Plan. The four (4) voting member IAG will be replaced when a formal governance mechanism is adopted as a result of the strategic planning process. The IAG membership is as follows:

- One (1) non-voting representative from the King County E-911 Program Office.
- One (1) person representing NORCOM and Valley Communications Center.
- One (1) person representing the PSAPs operated by the City of Bothell, City of Enumclaw, City of Issaquah, Port of Seattle, City of Redmond, University of Washington, and Washington State Patrol (each PSAP without a designated voting member may designate a non-voting member).
- One (1) representative from the PSAPs operated by the City of Seattle.
- One (1) representative from the PSAP operated by the King County Sheriff's Office.

# **Future Challenges**

The success of a regional governance structure is dependent on overcoming historical relationships between the PSAPs and the King County E-911 Program Office, which resulted in a lack of trust between the parties. Substantial work has already been done in this regard, with the formation of the IAG, which has improved dialogue, collaboration, and transparency. In addition, steps taken by all partners through the scoping and strategic planning processes have led to

stronger relationships and improved communications. Continuing to strengthen that communication will be an ongoing priority. A formal agreement will be needed on establishing an effective and consistent communications structure. This has been among the main issues identified by the participating agencies.

The Governance Task Force recognizes that the King County Council has statutory authority over revenue and budget decisions. A principal challenge will be to develop a governance model that ensures meaningful participation by the PSAPS on issues that affect PSAPs operations and budget. Any governance model must have an institutionalized structure so that it can continue to function through conditions of staff turnover and rotation.

# **Summary of Key Issues**

Decision-Making Authority, Feedback, and Transparency

#### A formal decision-making process is needed.

The King County Council has authority over appropriations, while the E-911 Program Office has authority to make decisions within its budget. There is not a formal process in place for PSAPS to participate in deliberations or to make recommendations to the King County E-911 Program Office or the King County Council. Decisions made by the King County E-911 Program Office decisions may often impact the PSAPs without formally soliciting and considering their input. Often, there is a lack of involvement by higher-level policy and elected officials at key decision points. This includes decisions regarding program priorities, projects, timing, and expenditures.

In the past, funding, equipment, and projects have been deployed to the PSAPs without PSAPs having meaningful input into those decisions. An example was SMART 911, where there was little consultation. As a consequence the plan wasn't fully considered and some PSAPs were unwilling or unable to run the technology when it went live due to security issues and other challenges.

A formal input structure with consistent representation, attendance, and accountability for decisions is critical to the success of a new governance model. PSAPS would like clarity about roles and authority at all levels of the regional system. PSAPs would also prioritize meaningful input into projects, planning, and budgeting before those decisions are made. Additionally, transparency around budget and expenditures is important, as are predictable timelines and processes for effective consideration of operational, technical, and fiscal issues.

#### Conflict Resolution

# A plan for conflict resolution system-wide is needed, including who has authority, and what escalates a conflict up the system.

No formal or consistent mechanism exists for resolving conflicts or elevating issues for consideration. A structure that can allow for these issues to be raised will be critical to any governance model. The need for conflict resolution could include addressing King County E-911 Program Office decisions that may have adverse impacts on one or more PSAPS or, in turn, PSAP decisions that may impact the regional system. Specifics to consider are how and when to trigger

the conflict resolution process, who has authority to resolve conflicts, and what escalates a conflict up the regional system.

#### Coordination/Communication

# There is a strong demand for establishing agreed upon protocols for communication between the King County E-911 Program Office and the PSAPs, as well as between the PSAPs.

Historically, stability in system technology did not require a significant need for PSAP coordination and communication. However, the advancement and cost of new technology and the operational changes it requires calls for more coordination and collaboration at all levels of the King County Regional E-911 System. The System can better leverage technology investments with improved coordination/communication between the parties.

Historically, the lack of effective communication between the E-911 Program Office and PSAPs at times resulted in confusion and mistrust. Some examples include:

- During bi-monthly meetings, PSAPs would be informed of what was occurring, but not consulted.
- PSAPs had no formal avenue to be informed about operational issues.
- Communication was viewed as unilateral, from the King County E-911 Program Office to the PSAPs with no predictable mechanisms by which the PSAPs would be given an opportunity to provide input or ask questions.

Among the Governance Taskforce, there is consensus that a formal mechanism for coordinating activities across the PSAPs is needed to mitigate, plan for, and find efficiencies in decisions that could impact other PSAPs. PSAPs don't all have the same internal systems. Decisions could impact PSAPs differently and they may have to make adjustments to accommodate a regional plan.

It is appropriate that the E-911 Program Office represent King County and its PSAPS at the state Enhanced 911 Advisory Committee, and there needs to be formal lines of communication for the PSAPS to receive information and provide input on actions at the state level.

Issues that may not be directly addressed in developing a new governance model were also identified and discussed. They included:

- Lack of equity on backups throughout the County. In the current system, each PSAP has a stand-alone system and some PSAPs are sharing a backup (i.e. Redmond and Issaguah share NORCOM). In the event that these PSAPs require a backup at the same time, only one PSAP can be backed up successfully.
- Lack of agreement on technology investment process and timing.
- Lack of project management principles in place, no formal management systems
- Lack of predictable timelines and processes for effective consideration of operational, technical and fiscal issues.

#### TECHNOLOGY & OPERATIONS ISSUES

#### Introduction

The Technology and Operations Task Force is responsible for establishing a ten-year technology strategy for the King County Regional E-911 System. While not the sole focus of this effort, the migration to and sustained compatibility with national standards and practices for Next Generation 911 (NG911) has been identified as a key strategic goal for the System. Relevant reference standards and supporting documents have been listed in the Appendix of this brief.

The Task Force has begun a variety of parallel activities:

- Conducting interviews with each of the 12 PSAPs (Public Safety Answering Points) and the King County E-911 Program Office to identify critical issues facing 911 services and the emergency services dispatching community for the next 10 years.
- Gathering information on the existing systems and services in use by the King County E-911 Program Office and the PSAPs to develop an understanding of current operations.
- Understanding the possible impacts of the statewide ESINet on the future regional system.
- Gathering information on current or planned projects to assess impacts on long term strategic alternatives.

This work will then lead to a series of meetings where potential future-state models will be examined and discussed, leading to detailed work to establish the preferred strategies and information on implementation.

# **Strategic Technology & Operations Questions**

The Regional E-911 Scoping Committee identified a number of strategic questions, including:

- T1. What is the technology vision for the King County Regional E-911 System, in terms of the technology's purpose, evolution, and investment structure?
- T2. What are the technology requirements for integrating with the State E-911 system, and for local jurisdictions to connect to the King County Regional E-911 System?
- T3. What is the ongoing decision process for technology investments, including options, tradeoffs, priorities, budgets, and schedules?
- T4. What are the ongoing performance metrics for technology in the King County Regional E-911 System, including the performance of the system, vendors, and local partners?
- T5. What are the security requirements for the King County Regional E-911 System, including protection of the system, individual privacy, and proprietary information?
- T6. Addressing these strategic questions will entail assessing and defining the overall technical architecture, strategic goals and technology governance process for the King County Regional E911 System.

#### **Best Practices**

Manage, review and implement in alignment with national standards and best practices (i.e. (e.g. NENA, APCO, CALEA, PMP, FCC, USDOT, NFPA)). The work of the Technology and Operations Task Force will examine standards and industry best practices for both the 911 system technology and the operational practices needed to effectively support and use these systems. It will conform to King County security standards, formal standards and requirements established by Washington State for interfacing to the statewide ESINet. A listing of key reference standards and documents identified to date is included in the Appendix II (page 32).

#### Review of case studies

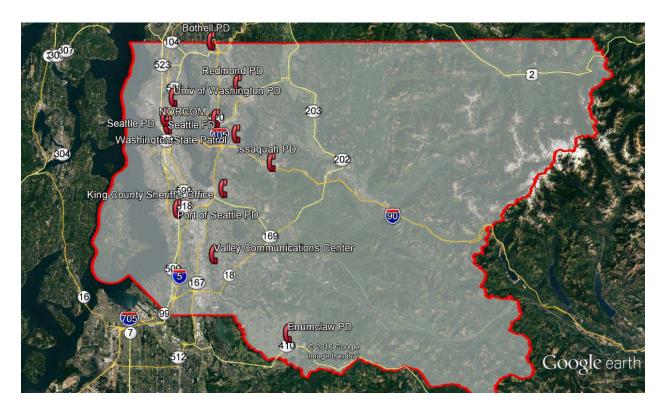
Using the Auditor's Report, coupled with the experiences of Task Force members and the consulting team, the Task Force will identify and examine the lessons learned from jurisdictions that have faced similar challenges to King County. These examples will include multi-PSAP counties in Washington as well as other areas of the country in hopes of gaining technology, programmatic, and operational insights into text-to-911.

As other models and lessons are examined, the Task Force will assess how technology and operational requirements were applied and the strategies used by the PSAPs to prepare for and implement NG911. This is a critical element of our work for the strategic planning effort since the E-911 Program Office continues to work collaboratively with the PSAPs to establish technical and operational models.

# **Baseline Questions**

What relevant technology is in use within the King County Regional E-911 System (the System) now?

The System is a decentralized architecture, with each of the 12 PSAPs directly interfaced to the statewide ESINet. A 13<sup>th</sup> "Test PSAP" is also connected to the ESINet to allow pre-deployment testing of technology changes before installing in the 12 PSAPs. See the map below of PSAP locations.



While a common system vendor and technology platform are used across the PSAPs, various components of the individual PSAP systems are scheduled for replacement at different times; this will be factored into long-term strategies. The table below provides a summary of the timing for equipment replacement.

	Pots-srv	Pots-srvb	VoIP-srv1	VoIP-srv2	Database1 server	OBJ-srv	AIM modules	Mediant 1000 gateway	Map Server	Pictometery Server	VIPER Switches
Bothell PD	Dec-16	Dec-16	Dec-16	Dec-16	Dec-16	Dec-16	Dec-17	Dec-17	Jan-17	Jan-18	Dec-17
Enumclaw PD	Jun-17	Jun-17	Jun-17	Jun-17	Jun-17	Jun-17	Jun-18	Jun-18	Jan-17	Jan-18	Jun-18
Issaquah PD	Jun-17	Jun-17	Jun-17	Jun-17	Jun-17	Jun-17	Jun-18	Jun-18	Jan-17	Jan-18	Jun-18
King County Sheriff	Nov-19	Nov-19	Nov-19	Nov-19	Nov-19	Nov-19	Nov-20	Nov-20	Jan-17	Jan-18	Nov-20
NORCOM	Dec-18	Dec-18	Dec-18	Dec-18	Dec-18	Dec-18	Dec-19	Dec-19	Jan-17	Jan-18	Dec-19
Port of Seattle PD	Dec-17	Dec-17	Dec-17	Dec-17	Dec-17	Dec-17	Dec-18	Dec-18	Jan-17	Jan-18	Dec-18
Redmond PD	Jun-18	Jun-18	Jun-18	Jun-18	Jun-18	Jun-18	Jun-19	Jun-19	Jan-17	Jan-18	Jun-19
Seattle Fire	Aug-20	Aug-20	Aug-20	Aug-20	Aug-20	Aug-20	Aug-21	Aug-21	Jan-17	Jan-18	Aug-21
Seattle PD	Aug-20	Aug-20	Aug-20	Aug-20	Aug-20	Aug-20	Aug-21	Aug-21	Jan-17	Jan-18	Aug-21
Test PSAP	Jun-17	Jun-17	Jun-17	Jun-17	Jun-17	Jun-17	Jun-18	Jun-18	Jan-17	Jan-18	Jun-18
U. of WA PD	Jul-20	Jul-20	Jul-20	Jul-20	Jul-20	Jul-20	Jul-21	Jul-21	Jan-17	Jan-18	Jul-21
Valley Comm	Sep-19	Sep-19	Sep-19	Sep-19	Sep-19	Sep-19	Sep-20	Sep-20	Jan-17	Jan-18	Sep-20
WA State Patrol	Feb-18	Feb-18	Feb-18	Feb-18	Feb-18	Feb-18	Feb-19	Feb-19	Jan-17	Jan-18	Feb-19

A high-level diagram of the current King County Regional E-911 System network is provided in Appendix II.

In addition, the King County E-911 Program Office has implemented, or is in the process of implementing, a number of ancillary systems and services that support either the processing of 911 calls or the maintenance and operations of the 911 system. These include interim solutions for Text-to-911, system management and monitoring networks, applications, and imagery to enhance mapping functionality and viewing for call takers. These systems will be integrated into the 10-year planning horizon.

The statewide ESINet has undergone a transition to a new vendor and for completing NG911 system architecture. The ESINet transition will touch each PSAP during 2017. This conversion will be integrated into current operations and will be play a significant role in developing the 10-year strategy.

What are the technology lessons from the 2015 King County Auditor's report on the King County Regional E-911 System operations?

Processing and routing 911 calls to the proper PSAP requires a complex interaction between the telecommunications carriers, the statewide ESINet, and the equipment at the PSAPs, to process calls and dispatch to law enforcement, fire and/or emergency medical services. Over the years, the King County E-911 Program Office has increased the number of supporting systems and services to meet the identified and emerging needs of 911 in general, and the PSAPs in particular, without a clearly identified strategy for sustaining the ongoing operational and replacement costs for these systems and services. In some cases, these systems or services have brought unforeseen technological, operational or financial impacts on the PSAPs.

The Task Force will consider each level of the call routing and handling process to make sure that technology strategies developed for the 10-year planning horizon have well understood acquisition, operation and replacement costs for all Partners. Operational policies and practices will be considered in order to provide so that clearly defined expectations. The task force will articulate responsibilities and risks aligned to each of the Partners including: King County E-911 Program Office, the PSAPs, and possibly shared responsibilities and risks. This will aid in clarifying the core mission and responsibilities of the King County E-911 Program Office and the King County Regional E-911 System to support the work of the Governance and Finance Task Forces.

The King County Auditor's report outlined the following:

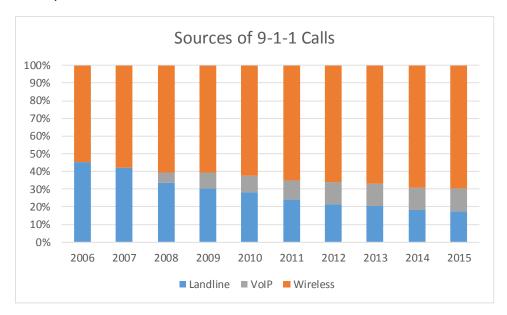
- King County Department of Information Technology's (KCIT) project review process can provide project oversight and review of project plans, business cases and cost benefit analysis of King County E-911 Program Office projects.
- KCIT also brings security expertise and processes to the King County E-911 Program Office and slate of projects.
- Implementing NG911 will be a complex multi-year process requiring a clear and detailed plan coordinated between the King County E-911 Program Office, 12 PSAPs and the State ESINet.
- Collaboration with stakeholders and clear decision-making is needed to plan effectively for emerging capabilities.

# **Existing Conditions**

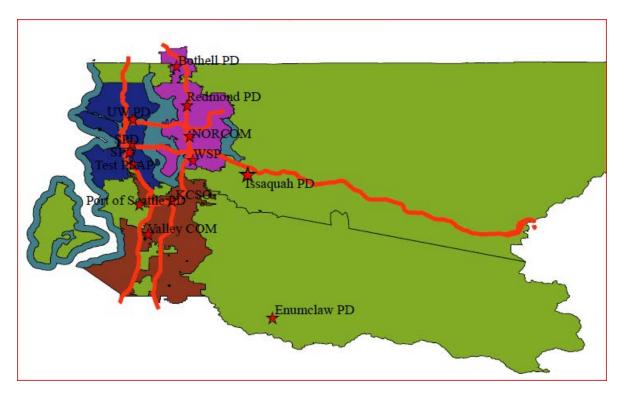
The System uses a decentralized architecture with equipment located at each of the 12 PSAPs that directly interconnects them to the statewide ESINet. This equipment is sourced from a single vendor, and provides a homogeneous mix of system capabilities and functionality so that each PSAP has access to comparable services. Connectivity between the PSAP equipment and the State ESINet is a combination of legacy telecommunications circuits and NG911 networks using internet protocol. While envisioned as a mechanism for preparing PSAPs for a full NG911 future, it may be necessary to make adjustments to this architecture to meet current NG911 strategies, capabilities and security requirements. A high-level diagram of the current King County E-911 System network is provided in Appendix II.

The State of Washington is replacing the current statewide ESINet with a network provided by a different vendor. This will bring new security and interface requirements that will need to be implanted to allow the PSAPs to interface to the next generation ESINet, is planned for completion in 2017. The new ESINet will most likely provide a stable environment for the King County Regional E-911 System during the 10-planning horizon.

King County continues to experience decreasing use of landline telephones for calls to 911, an increasing use of Voice over IP (VoIP) and wireless phones. This is a consistent trend across the country.



Wireless calls present a variety of challenges in emergency call processing including the need to route the call to a PSAP based on imperfect caller location information at the time the call is placed. Currently, wireless 911 calls are initially routed to the five largest law enforcement dispatch centers King County; Seattle Police, NORCOM, King County Sheriff's Office, Valley Com and Washington State Patrol. A map of the wireless call routing areas is provided below.



Wireless 911 calls are initially routed to one of 5 PSAPs in King County based on the coverage area of the cell site or cell site sector.

- Calls originating from cell sites/sectors along the primary State highways (shown as red lines in the map) are routed to the Washington State Patrol's PSAP
- Calls originating in the green area are routed to the King County Sheriff's Office
- Calls originating in the dark blue area are routed to the Seattle Police Department
- Calls originating in the purple area are routed to NORCOM
- Calls originating in the brown area are routed to Valley Com.

If the circumstances of an incident reported by a wireless caller require the response of law enforcement, fire or medical resources that are not dispatched by the PSAP originally receiving the call, the caller is transferred to one of the other seven PSAPs for further call processing and dispatch of local response units. In some situations, different PSAPs are involved in dispatching the various disciplines to a given location, further complicating how best to initially route and then transfer wireless calls. While wireless industry initiatives are making progress on improving wireless caller location improvements, local governance and decision making processes will guide future strategies related to how wireless calls are routed and managed from over 7,000 towers covering over 28,000 sectors in King County.

The King County E-911 Program Office provides direct funding to the PSAPs for a variety of technology and operational support costs. This includes direct support for a total of 23 personnel; including 9 engaged in GIS/CAD support, 9 engaged in IT system support, and 5 engaged in 911 and telephony support (a table showing the level of staffing supported in each PSAP is included in the Appendix). The Program Office also administers a mechanism for fund

disbursement for use by the PSAPs to support operational call receiver positions and 911 related technology investments.

This funding support is a critical component for the PSAPs and there will be pressure for it to continue. But the PSAPs understand that the core mission of accurately and reliably delivering 911 calls from the public to the PSAPs needs to be a primary focus of the King County Regional E-911 System, Balancing these needs and interests in the strategic plan for future technologies, system services and/or architectures.

# **Future Challenges**

The King County Regional E-911 System faces a number of challenges over the 10-year planning horizon. One of the most challenging of these is that it is difficult, if not impossible, to accurately predict how technology pressures in the latter years of a 10-year plan may impact the overall the System. Therefore, even with detailed strategies to guide the early years of the 10-year plan, it will be vital to establish ongoing technology and operations evaluation, recommendation and decision processes so that the system and the agencies can adapt to changes and risks that will inevitably occur.

The uncertain future of the full range of NG911 technologies presents a significant challenge. While there is a fairly solid base of standards and practices related to the fundamental architecture of the heart of NG911 networks, there are a number of visions for the types of services and capabilities that might be available once the core infrastructure is in place on a regional or nationwide basis. While there is a clear need and interest to get Text-to-911 services operational (initially with an interim solution and then in a native mode over NG911 infrastructure) there is less clarity of the operational benefits of enhanced capabilities such as the ability to transmit photos, video or other data as part of "calling 911". It will therefore be important to establish a process for routine PSAP/Regional 911 Office engagement. The community must be engaged in reviewing and evaluating these capabilities and be involved in as collaborative a decision-making a practical before solutions are deployed at either the PSAP or regional level.

Planning for the future must be well informed and will be constrained by the economic capacity of the King County E-911 Program Office and the economic and operational capacities of the individual PSAPs. It is likely that over the 10-year planning horizon there will be other jurisdictions in the immediate region or across the country deploying enhanced NG911 capabilities and services. It will be imperative for these to be carefully evaluated against local constraints and priorities before undertaking any deployment of these in the King County Regional E-911 System.

# **Summary of Key Issues**

#### Governance

Clear roles and responsibilities and decision-making processes are needed to effectively deal with emerging changes.

There appears to be a consensus that at its heart, the primary function of the King County E-911 Program Office and the King County Regional E-911 System should be focused on the effective and efficient processing of "calls" to 911 so they are quickly and accurately delivered to the PSAPs responsible for dispatching emergency services to the caller's location. To accomplish this function, a combination of regional and PSAP technology systems will be required, along with security, maintenance and operational practices to sustain their effective performance. All of these will need to be conducted within a governance process that balances King County Regional E-911 System and individual PSAP needs, risks and constraints.

#### Pace of Change

The pace of technology change brings new public and user expectations that can stress 911 systems and operations, and will require a continuous process for review and evaluation of evolving changes and fiscal impacts.

While there is a fairly high degree of certainty on how the State's ESINet architecture will enable the transition to NG911 capabilities, there is less certainty about what those future capabilities will be and how rapidly they will emerge as operational realities. NG911 means many different things to different people. As discussed above, "calls" to 911 are moving beyond traditional voice telephone calls to include capabilities such as texting and the delivery of additional content and data as pictures, video or other data interactions. In some situations, the "caller" or "reporting party" of the future may actually not be a person at all, but rather monitoring or telemetry device that automatically contacts 911 in the event of a vehicle crash or similar emergency event.

As part of its work, the Technology and Operations Task Force will develop a local definition of what NG911 will mean for the King County Regional E-911 System over the 10-year planning horizon. It will not be possible to anticipate all of these changes at the front-end of this process, so planning and executing these enhanced capabilities will require a well-structured and ongoing governance processes that evaluate the technological, security, operational and fiscal implications of incremental changes over time.

#### Architecture Complexity and Strategy

The overall architecture of the King County Regional E-911 System needs to be evaluated, with a new strategy developed to respond to overall system objectives and evolving future conditions. This may require an ongoing Technology & Operations committee to conduct continuous review and evaluation.

The strategic plan will need to evaluate and recommend whether the King County Regional E-911 System continues with the currently decentralized 911 technology architecture or if alternative strategies using a shared and more streamlined system architecture should be established. Strategies identified need to assure that future technologies can meet adopted security standards and support high reliability, resiliency, survivability, and accuracy. This needs to be accomplished with the understanding that the survivability of the King County Regional E-911 System as a whole needs to be achieved in an environment where multiple PSAPs may be adversely impacted by a

single catastrophic event. Strategies will also need to take into consideration the full lifecycle costs for acquiring, maintaining and replacing the technologies over time, both on a regional system perspective and for the system and equipment needed at each of the PSAPs

Business strategies need to balance the operational needs of the PSAPs long-term effectiveness of the King County E-911 Program Office and sustaining the quality of 911 service to citizens. Clarity of business operating strategies allows effective development of technology strategies that is responsive to shifts in demand from population growth, expectations from a changing demographic, and new capabilities to serve differently abled constituents. This will require that the decision-making processes be put in place to guide technology planning, implementation and operations and be integrated into the governance model as a continuing responsibility of all the involved entities.

#### Security

# Security of the King County Regional E-911 System overall, as well as other critical PSAP systems, needs to be a constant focus and priority.

Security is a critical consideration at all levels of the emergency call handling process, not just for the King County Regional E-911 System elements themselves. There are currently no agreed upon security policies and architecture for the Regional E-911 System and this needs to be a current and continuing focus. The PSAPs utilize a wide variety of other technology systems that either touch or are impacted by the technologies in place for the Regional E-911 System. Therefore, establishing and sustaining security standards and practices will require close coordination and collaboration between the King County E-911 Program Office and the PSAPs to allow the needs and interests of all involved entities to be met.

#### Call & Operational Complexity

# The nature of emergency calls is changing rapidly, with ever-increasing volumes of calls from wireless devices and emerging technologies such as text, video and telematics calls to 9-1-1.

These changes will create increasing complexities in the technologies and operational practices needed to properly route and handle calls. The strategic planning process will identify mechanisms to deal with these challenges in a technologically sound and fiscally responsible manner. As these new technologies emerge, there will also be increasing public expectations that they be used in our local 911 and emergency response environment. Given the level of diversity in the geographically distributed PSAPs and the jurisdictions they serve, this will likely have implications on funding requirements as well as the distribution of funding.

#### FINANCE ISSUES

#### Introduction

The Finance Task Force is charged with the research, deliberation, and recommendation of a 10-year Sustainable Financial Plan for the King County Regional E-911 System. The King County Regional E-911 Strategic Plan Scoping Process required that the Task Force address the following set of questions during the strategic planning process. The Task Force is progressing through its work program since being convened in late September.

Currently, the Task Force is reviewing the principles and key questions raised during the scoping process and has received detail on past, current, and forecasted revenues and costs. In addition, the Task Force is receiving information on policies that guide the:

- Financial management
- Distribution of resources to the PSAPs
- Assumptions and drivers about growth in future costs

# **Strategic Finance Questions**

The King County Regional E-911 System Scoping Committee identified a number of strategic questions, including:

- F1. What are the procedures and processes for forecasting, reporting, auditing, and operations related to King County Regional E-911 System revenue and expenditures?
- F2. What are the funding needs and revenue strategies for the King County Regional E-911 System, including NG911 upgrades and keeping the system up to date over time?
- F3. What are the stakeholder reporting requirements related to the King County Regional E-911 System finances, including revenue, expenditures, efficiency, and effectiveness?
- F4. What are the investment management policies for the King County Regional E-911 System related to forecasting, investments, reserves, and contingencies?

In consideration of the Strategic Finance Questions, the Finance Task Force expects to recommend a 10-year Sustainable financial plan that:

- Is clear, understandable, and transparent in its development and reporting.
- Supports agreed-to system responsibilities of stakeholders to include the King County E-911 Program Office, King County, the PSAPs and their sponsoring agencies.
- Includes a mechanism to provide accountability for all expenditures articulated through financial management policies, timely reporting, and audits.
- Incorporates a measure of flexibility to accommodate evolving system needs and changes in resources.

#### **Best Practices**

The Task Force is currently reviewing practices of other comparable Washington (and nationwide) counties to better understand their practices related to service responsibility, financial management, and accountability. The Task Force would like to better understand how other E-911 programs in Washington State and other comparable places are funding and managing their E-911 programs. The term "best practices" does not necessarily reflect the purpose of the inquiry, since most Task Force members are interested in both the nature of the practices of other programs and whether those practices lead to effective and sustainable financial management of the program.

The work program in this task is divided into two areas. The first examines financial practices in Washington State counties that have service delivery conditions similar to King County. The second area would examine relevant and effective practices in other agencies across the country. The work will try to identify practices in other comparable settings that might be portable to the organizational, service delivery, and legal/policy conditions in King County and Washington State. The Task Force is also consulting other resources such as the generally accepted financial management principles for municipal agencies.

The Task Force is reviewing these and other questions related to financial best practices:

What are the organizational characteristics of other counties with regard to roles, responsibilities, and accountability between the King County E-911 Program Office and PSAPs?

What are the financial policies other places put into action to ensure performance and accountability for service delivery across the King County Regional E-911 System?

What are other cities, counties, and PSAPs doing with respect to financial management of their E-911 programs? Are King County's challenges unique or are there larger structural issues?

How are other places choosing to fund their E-911 services?

What are the financial policies that govern the expenditures, budgeting, and delivery of services for both operations and capital services?

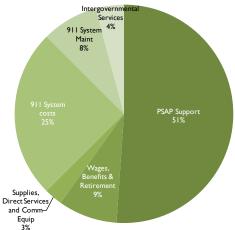
How are other places proceeding with NG911 technology upgrades with respect to managing their financial position?

#### **Baseline Questions**

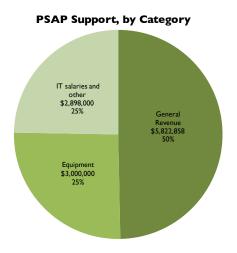
#### How is funding distributed now?

Revenues support the maintenance of the King County Regional E-911 System. It does so by supporting operational and capital expenditures at the King County E-911 Program Office and through direct support to the PSAPs. The chart to the right shows the current distribution of E-911 revenue. Approximately 51% of revenue supports the PSAPs with the balance supporting the King County E-911 Program Office. The level of PSAP support reflects previous decisions by the King County E-911 Program Office (the Task Force is currently reviewing information on these decisions).

# E-911 Program Office Expenditure



Actual expenditures from 2015



The direct support to PSAPs covers expenditures in three broad categories. A quarter of revenues goes to supporting equipment at the individual PSAPs necessary for system integration. Another quarter of revenues goes to FTE support for qualified IT activities. The remaining 50% of revenues can be used for approved 911-related purposes. These activities must fall within the State guidelines and King County code (the Task Force is currently reviewing information on these guidelines).

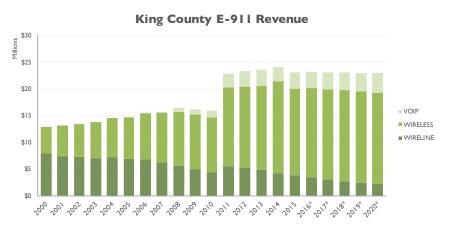
2016 Budgeted distribution

# What are projections for future King County Regional E-911 System Revenue?

Revenue is forecasted to be relatively flat through 2020 (current budget forecast year). Revenue has not increased since the excise tax increase in 2011, however, little growth in the base number of phone lines was evident even before that time. While growth is expected in VOIP and wireless lines during the forecast period, these increases will not overcome the rate at which households are abandoning their wired lines.

What are the financial lessons from the 2015 King County Auditor's report on the King County E-911 Program Office operations?

The financial consultant found that the King CountyE-911 Program Office's financial condition is unclear due to

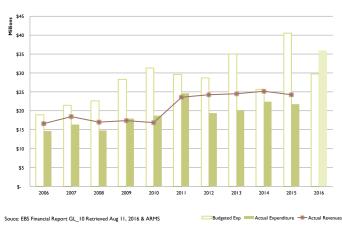


the commingling of operating and capital expenditures. Planned spending will need to be curtailed to match available revenue in order to avoid depletion of reserves and a potential negative financial position. The King County E-911 Program Office is moving forward with a series of initiatives to better account for its capital and operating costs. The Task Force has requested more detailed data about King County E-911 Program Office and PSAP expenses to better understand where adjustments can be made.

# **Existing Conditions**

The King County E-911 Program Office budget has experienced a growing fund balance as a result of deferred or unfinished capital projects.

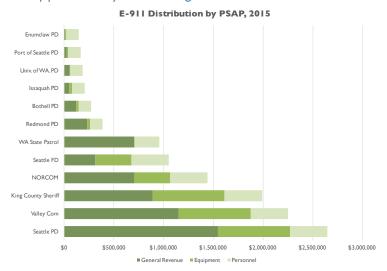
Over the past decade, the King County E-911 Program Office has had a gap between budgeted expenditures and actual expenditures. The exact source of the gap is not clear due to the past practice of commingling operating and capital expenses. However, it is thought that the bulk of the balance is due to the delay of capital projects from their initial budgeted timeline. In addition, some resources were reserved for future



NG911 planning, although the actual cost and timing for NG911 projects is not known. This gap in expenditures has led to large fund balances, currently estimated to be \$17 million by the end of 2016.

## King County Regional E-911 System revenue supports the system through the PSAPs

The distribution of 911 revenues to the PSAPs is calculated through a series of formulas that are weighted by call volume. General revenue (available to fund a variety of 911-related expense) is weighted directly by call volume and augmented for large PSAPs. Revenue distribution supporting equipment use call volume to sort PSAPs into large and small categories for distribution with fixed amounts established for each category of PSAPs. Small PSAPs are funded one-half FTE for both IT and GIS. Large PSAPs are funded one FTE each for IT, GIS, and PBX/Viper Admin.



# **Summary of Key Issues**

#### Financial Sustainability

Forecasted increases in operating and capital expenditures need to be evaluated for accuracy and whether alternative action is required. Forecasted growth in these expenditures is driving fiscal deficits in the future.

King County budget financial projections reveal a negative fund balance for the King County E-911 Program Office by the end of the 2022 budget biennium. The County anticipates operating and capital expenditures will consume current fund surpluses over the next three budget biennia. The Task Force is currently focused on evaluating the drivers of expenditure increases. The Task Force has received in-depth and insightful data from the King County E-911 Program Office that gives it confidence it is seeing the most in-depth assessment of the financial situation.

However, at this time we do not yet have the fullest picture of expenditures related to the King County Regional E-911 System and what specific elements are driving costs whether they be at the E-911 Program Office or PSAP level. We feel that it is imperative that we have this understanding so that we can make assessments about:

- The accuracy of future expenditure forecasts,
- Whether projected deficits are inevitable under the current revenue picture,
- Whether alternative courses of action are required, and
- How financial changes to the system might set the path to financial sustainability.

Our specific inquiry into expenditures is focused on the following issues:

 Capital Planning and Expenditures. The forecasted budget includes large increases in capital expenditures. Historic under expenditures have led to large current beginning fund balances. It is thought that the bulk of the balances are due to years of successive delays of capital projects from their initial budgeted timeline; however, it could include unanticipated vacancies, unneeded contingencies, etc. The Task Force is seeking to better understand how the King County E-911 Program Office identifies, prioritizes, budgets, and delivers these capital projects. They would like to avoid situations in the past where significant under-expenditures occurred.

- Direct Services by the PSAPs funded by the King County E-911 Program Office. Approximately 51% of Program Office's expenditures support E-911 services at the PSAPs. Revenue distribution occurs mainly via a set of formulas weighted by call volume. Additionally, the direct service expenditures support PSAP FTEs engaged in E-911 GIS and IT activities. The Task Force is in the process of uncovering the original rationale for these arrangements, as well as the formulaic basis of the funding levels to the PSAPs. The Task Force anticipates revisiting the policy basis, funding levels, and distribution to PSAPs as part of its work program. Specifically, we are currently trying to understand what portion of total PSAP expenditures are funded by the King County E-911 Program Office as well as understanding the duties of E-911 Program Office funded FTEs (GIS/CAD; IT System Specialist and PBX/VIPER Admin) at the PSAPs.
- Financial Implications of NG911. The Technology and Operations Task Force is developing local definitions for what NG911 will mean for the King County Regional E-911 System. The Finance Task Force is concerned that such uncertainty regarding the capabilities and technology changes will be difficult to translate into concrete financial needs that both the Program Office and PSAPs can plan for. This concern is not only about understanding the increased capital costs of new technology, but also if any operating efficiencies under the new system would occur, including reduced staffing or support costs. If NG911 is not fully defined, it is difficult to make a financial commitment to spending with uncertain timing and costs.
- Program Office Staffing and Services. The Program Office has recently reorganized some
  of its services and increased its employee count. They have recently transferred 6
  employees to KCIT and the E-911 Program Office will transfer funds to support the
  employees. The office has also hired additional administrative and project management
  staff necessary to administer the office and deliver projects. The Task Force is in the
  process of understanding the motivations and financial implications of these changes.
- Reserve Policies. The Task Force has raised questions about the process and assumptions
  that the E-911 Program Office uses to set its fund reserve. The Task Force believes that
  maintaining a reasonable level of unreserved fund balances can provide insurance
  against unanticipated expenditures and revenue shortfalls moving forward. These reserve
  policies should be set with regard to the purpose and appropriateness of target levels.
- Contracting with Vendors. The Task Force will be examining the process by which the E-911 Program Office contracts with vendors for services. The Task Force is in the process of better understanding policies that govern vendor procurement and management to ensure that more advanced, strategic practices are in place.

# Revenue adequacy of existing sources will need to be evaluated as part of a financial sustainability plan.

The phone line excise tax rates are fixed nominally to the number of phone lines. The resulting revenue yield has been flat going back to the mid-2000s. The gains in the growth of VOIP and wireless phones lines have been offset by the reduction in phone lines from households who have phased out their landlines. The Task Force is concerned that the revenue adequacy of the excise tax alone may not be sufficient to meet the current costs of service delivery, let alone the financial demands required to implement new technology, capabilities, and services. The Task Force has raised questions regarding the excise tax distribution by the State. It is our understanding that the State is responsible for collecting the tax, but more clarity is needed to confirm the State is accurately capturing all the revenue at the county level and distributing it to King County appropriately.

The Task Force is currently evaluating the nature and scale of operating and capital expenditures to better understand what is likely to drive future expenditures; however, members of the Task Force are concerned that inflation and the growth in labor and capital costs might pose a key challenge for how the King County E-911 Program Office is currently funded. The Task Force is investigating how other places fund these services and will consider if new revenues are necessary to bring funding in line with needed service costs.

#### Core Services

# More clarity of financial responsibilities and associated costs of the King County Regional E-911 System is needed.

There is ambiguity about the appropriate roles of the King County E-911 Program Office and the PSAPs in supporting the Regional E-911 System. Further, the review is assessing the policy basis that determines what core services the Program Office is required to provide, and beyond those costs, what are the financial implications, if any, to individual PSAPs. A definition of the core services of the Program Office is necessary to understand delineation of costs among the Program Office and PSAPs. The Task Force has observed some inconsistency about how each PSAP allocates their share of King County Regional E-911 System funding. Mutual agreement is needed on how the E-911 Program Office and PSAPs use their funds most effectively and efficiently. There is a need for system-wide standards and policies on how King County Regional E-911 System funded FTEs in PSAPs are supporting E-911 services. The Task Force is investigating how the E-911 Program Office and each PSAP spends their share of funding, including E-911 Program Office funded FTEs. This may reveal the similarities and inconsistencies across PSAPs, and inform whether allocation decisions should be normalized system-wide as fundamental to the E-911 Program Office's role in delivering services. However, role clarity will also need a measure of flexibility to accommodate evolving system needs and changes in resources.

#### Financial Policies & Accountability

#### Clear financial policies and accountability are needed.

The Task Force will review and recommend updates to financial policies related to budgeting and accounting, and, potentially the distribution policies for support of direct services at the PSAPs. The historic commingling of capital and operating budgets masked some long-term issues. In some cases, it appears that financial policies are lacking, outdated, or absent altogether. The Task Force believes there need to be clear measures to provide accountability through clear financial management policies, timely reporting, and audits. Specific areas of improvement thus far include the need for improved internal controls and oversight to review and authorize outlays in the E-911 Program Office and funds distributed to the PSAPs through the Program Office.

### Distribution of Funding

A reasonable, clear, and transparent system for distribution of funding is essential, and must evolve with changing technologies, operations, and service demands.

Funds are distributed using a formula and metrics established by the King County E-911 Program Office, but in the past the PSAPs have lacked a full understanding of those formulas. Components of the formulas and their implications should be clear. For example, complications can arise when funding is tied to 911 call volume when individual jurisdictions have varying efforts to divert non-emergency calls from 911. All parties should have a shared understanding of how the funding decisions are made and the baseline costs. Transparency is needed for policies regarding the distribution of general revenue, technical personnel, and equipment support to PSAPs.

# **Appendix I:** Strategic Plan Shared Vision, Guiding Principles, & Goals

The King County Regional E-911 Scoping Committee identified Guiding Principles and Goals for the strategic planning process and the resulting King County Regional E911 System. These are:

#### Shared Vision — for the Regional E-911 System

Consistent with national best practices, King County's Regional E-911 System will be among the best in the country in terms of:

- Rapid and effective routing of requests for service Efficient use of public resources
- Effective deployment of evolving technology
   Adherence to the guiding principles (below)

## Guiding Principles — for the Regional E-911 System

#### 4. Process

- g. Transparency Transparency in operations, procurement, decision-making, and financial management
- h. Project Management Principles Keep current with industry standards in terms of project management and operating principles (PMP)
- i. Collaboration Maintain a collaborative approach among all jurisdictions and project partners, including open and regular communication
- Predictability Predictability in operations and decision-making
- k. Advocacy Advocate at all levels to influence best practices and appropriate resources in the public and private sectors
- I. Inclusion includes a broad array of voices

#### 5. Finances

- d. Fiscal Responsibility Equitable, transparent, and responsible fiscal management
- e. Financial Sustainability Manage toward long-term financial sustainability
- f. Cost Effective Leverage resources to provide the best possible services

#### 6. Standards

- d. National Best Practices Stay in step with national best practices in operations
- e. Performance Metrics Track progress with specific and transparent metrics
- f. Continuous Improvement Respond to recommendations, and continue to seek opportunities for improvement (including the King County Auditor's 2015 report)

#### Goals — for the Regional E-911 System

As part of the strategic planning process, develop a dashboard of outcome metrics to monitor progress toward these goals, to be in alignment with the guiding principles above.

- 7. No Request Lost Never lose track of a request for assistance
- 8. Prompt Response Promptly route and respond to every request for assistance to promote rapid dispatch
- 9. Seamless System-wide Technology A county-wide system that is fully integrated and interoperable, minimizing transfers and ensuring reliability
- 10. Meet or Exceed Industry Standards A county-wide system that meets or exceeds current industry standards and is continuously improved to adapt to evolving technology and needs
- 11. Equity Equitable access to the E-911 system by all communities and individuals, recognizing and addressing the obstacles faced by specific groups.
- 12. Secure, Resilient & Survivable A county-wide system that is secure, resilient, and survivable

# **Appendix II:** Technology & Operations Background & References

A complete listing of National Emergency Number Association (NENA) Standards and Documents can be found at <a href="http://www.nena.org/page/standards">http://www.nena.org/page/standards</a>

Key Standards and Documents related to the deployment of NG911 systems and strategies include:

NENA i3 Solution – Stage 3 – This web page describes the migration actions that build towards the full implementation of the i3 end-state, which is defined in the standards document discussed below.

http://www.nena.org/?page=i3\_Stage3

NENA Detailed Functional and Interface Standards for the NENA i3 Solution (NENA-STA-010.2-2016) – This document describes the "end state" of an IP-based Emergency Services IP Network (ESINet) once full migration from the legacy circuit-switched technologies for call routing and delivery has been completed.

http://c.ymcdn.com/sites/www.nena.org/resource/resmgr/standards/NENA-STA-010.2\_i3\_Architectu.pdf

NENA Security for Next-Generation 911 Standard (NENA 75-001) – This document identifies the basic requirements, standards, procedures or practices to provide the minimum levels of security applicable to NG911 entities.

http://c.ymcdn.com/sites/www.nena.org/resource/collection/9652017C-3DDB-4F48-91BE-57871A0E68E6/NENA\_75-001-v1\_NG-Security.pdf

NENA Next Generation 911 Security Audit Checklist (NENA 75-502) – This is a companion document to NENA 75-001 and provides detailed checklists to audit conformance to the Standard.

http://c.ymcdn.com/sites/www.nena.org/resource/resmgr/Standards/NENA\_75-502.1\_NG-SEC\_Audit\_C.pdf

NENA VoIP Characteristics Technical Information Document (NENA 08-503.1) – This document provides an overview of Voice over IP technology.

http://c.ymcdn.com/sites/www.nena.org/resource/resmgr/Standards/NENA\_08-503.1\_VoIP\_Character.pdf

King County Security Standards

Current King County Regional E-911 System Architecture (next two pages)

